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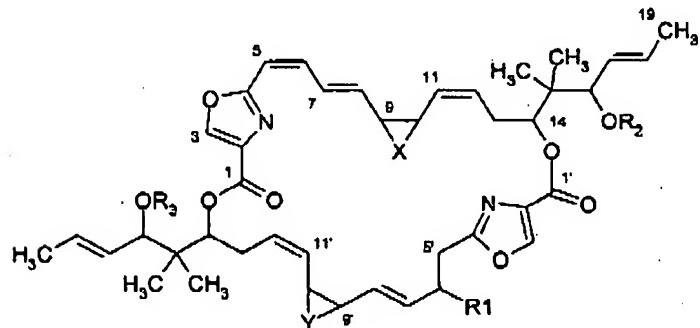
AUG 30 2007

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of claims:

1. (Currently Amended) A disorazole compound of the general formula I



Formula I

in which independently of one another

R1 is:

- (i) hydrogen,
- (ii) OR4,
- (iii) part of a double bond to C5',

R2, R3 and R4 are:

- (i) hydrogen,
- (ii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (iii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (iv) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl

(v) (C_1-C_4)-alkoxycarbonyl, (C_1-C_4)-alkylaminocarbonyl (C_1-C_4)-alkylaminothiocarbonyl, (C_1-C_6)-alkyl-carbonyl or (C_1-C_6)-alkoxycarbonyl-(C_1-C_6)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1-C_{20})-alkyl, NH-(C_3-C_{12})-cycloalkyl, OH, O-(C_1-C_{20})-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1-C_{20})-alkyl, OH, O-(C_1-C_{20})-alkyl and/or (C_3-C_8)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

R3 is:

- (i) unsubstituted or substituted (C_1-C_6)-alkyl,
- (ii) (C_1-C_4)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (iii) unsubstituted or substituted (C_1-C_4)-alkyl-(C_6-C_{14})-aryl, unsubstituted or substituted (C_1-C_4)-alkyl-heteroaryl
- (iv) (C_1-C_4)-alkoxycarbonyl, (C_1-C_4)-alkylaminocarbonyl (C_1-C_4)-alkylaminothiocarbonyl, (C_1-C_6)-alkyl-carbonyl or (C_1-C_6)-alkoxycarbonyl-(C_1-C_6)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1-C_{20})-alkyl, NH-(C_3-C_{12})-cycloalkyl, OH, O-(C_1-C_{20})-alkyl to take place singly or, on identical or different atoms, multiply by identical or different

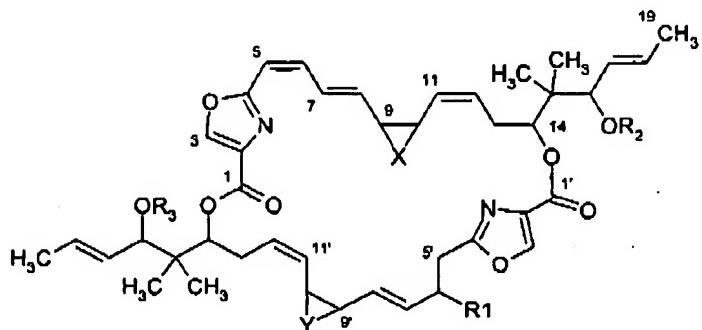
substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, OH, O-(C₁-C₂₀)-alkyl and/or (C₃-C₈)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond,
with the proviso that disorazole A1 (in which R1 is methoxy, R2 and R3 are hydrogen, X is oxygen and Y is the part of a double bond), disorazole F2 (in which R1 is hydroxyl, R2 and R3 are hydrogen, X is the part of a double bond and Y is the part of a double bond) and disorazole E (in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is oxygen) are excluded, its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof.

2. (Currently Amendend) The compound of claim 1, wherein R1 is hydrogen or part of a double bond to C_{5'}, and R2 are is hydrogen, R3 is methyl and X and Y are oxygen. independently of one another, oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, or part of a double bond.

3. (Currently Amended) A pharmaceutical composition comprising a disorazole compound of the general formula Ia formula I as claimed in Claim 1:



Formula Ia Formula I

in which independently of one another

R1 is:

- (i) hydrogen,
- (ii) OR₄,
- (iii) part of a double bond to C5',

R2, -R3 and R4 are:

- (i) hydrogen,
- (ii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (iii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (iv) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl,

(v) (C_1 - C_4)-alkoxycarbonyl, (C_1 - C_4)-alkylaminocarbonyl (C_1 - C_4)-alkylaminothiocarbonyl, (C_1 - C_6)-alkyl-carbonyl or (C_1 - C_6)-alkoxycarbonyl-(C_1 - C_6)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1 - C_{20})-alkyl, NH-(C_3 - C_{12})-cycloalkyl, OH, O-(C_1 - C_{20})-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1 - C_{20})-alkyl, OH, O-(C_1 - C_{20})-alkyl and/or (C_3 - C_8)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

R3 is:

- (v) unsubstituted or substituted (C_1 - C_6)-alkyl,
- (vi) (C_1 - C_4)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (vii) unsubstituted or substituted (C_1 - C_4)-alkyl-(C_6 - C_{14})-aryl, unsubstituted or substituted (C_1 - C_4)-alkyl-heteroaryl,
- (viii) (C_1 - C_4)-alkoxycarbonyl, (C_1 - C_4)-alkylaminocarbonyl (C_1 - C_4)-alkylaminothiocarbonyl, (C_1 - C_6)-alkyl-carbonyl or (C_1 - C_6)-alkoxycarbonyl-(C_1 - C_6)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1 - C_{20})-alkyl, NH-(C_3 - C_{12})-cycloalkyl, OH, O-(C_1 - C_{20})-alkyl to take place singly or, on identical or different atoms, multiply by identical or different

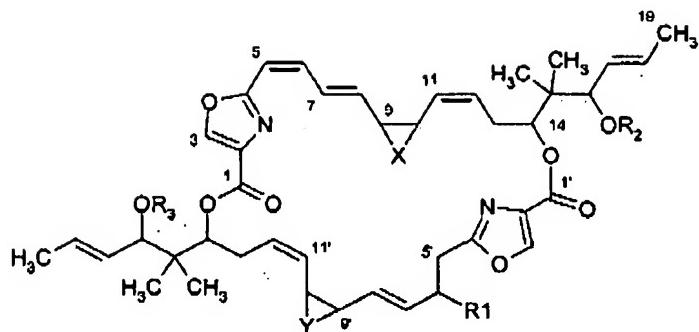
substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, OH, O-(C₁-C₂₀)-alkyl and/or (C₃-C₈)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond, ~~with the proviso that the compound in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is the part of a double bond is excluded,~~ its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof,

and a pharmaceutically acceptable carrier, diluent or excipient.

4. (Currently Amended) A method for the treatment of oncoeses selected from the group consisting of tumors of the lung, the breast, the stomach, the neck, the uterus, the prostate, the head and neck, the large and small intestine, and the liver and the blood system; ovarian carcinoma, prostate carcinoma; glioblastoma; lung carcinoma; breast cancer; skin cancer; colonic cancer; renal cell cancer; hepatic cancer; pancreatic cancer; cervical cancer; and cancers of the brain, comprising administering a compound of the general formula Ia

***Formula 1a***

in which independently of one another

R1 is:

- (iv) hydrogen,
- (v) OR4,
- (vi) part of a double bond to C5';

R2, R3 and R4 are:

- (vi) hydrogen,
- (vii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (viii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (ix) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl,
- (x) (C₁-C₄)-alkoxycarbonyl, (C₁-C₄)-alkylaminocarbonyl (C₁-C₄)-alkylaminothiocarbonyl, (C₁-C₆)-alkyl-carbonyl or (C₁-C₆)-alkoxycarbonyl-(C₁-C₆)-alkyl,

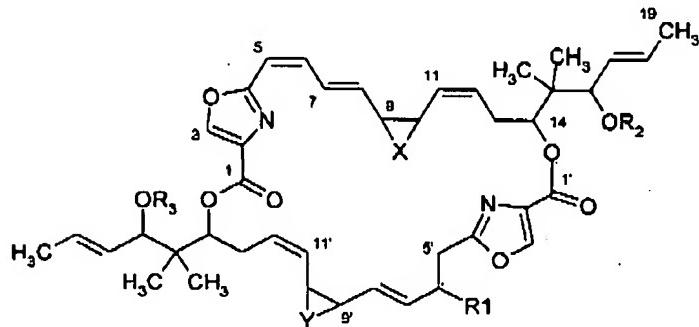
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, NH-(C₃-C₁₂)-cycloalkyl, OH, O-(C₁-C₂₀)-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, OH, O-(C₁-C₂₀)-alkyl and/or (C₃-C₈)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond,
with the proviso that the compound in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is the part of a double bond is excluded, its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof,
alone or in combination with a cytotoxic substance and/or an inhibitor of signal transduction, to an individual in need thereof of such treatment alone or in combination with a cytotoxic substance and/or an inhibitor of signal transduction.

5. (Currently Amended) A method of inhibiting mitosis in rapidly and uncontrolledly proliferating endogenous cells for the treatment of a disease in humans or animals, which is

~~based on the rapid and uncontrolled proliferation of endogenous cells comprising~~
 administering a compound of the general formula Ia



Formula Ia

in which independently of one another

R1 is:

- (vii) hydrogen,
- (viii) OR₄,
- (ix) part of a double bond to C5',

R2, R3 and R4 are:

- (xi) hydrogen,
- (xii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (xiii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (xiv) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl,

(xv) (C_1 - C_4)-alkoxycarbonyl, (C_1 - C_4)-alkylaminocarbonyl (C_1 - C_4)-alkylaminothiocarbonyl, (C_1 - C_6)-alkyl-carbonyl or (C_1 - C_6)-alkoxycarbonyl-(C_1 - C_6)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1 - C_{20})-alkyl, NH-(C_3 - C_{12})-cycloalkyl, OH, O-(C_1 - C_{20})-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C_1 - C_{20})-alkyl, OH, O-(C_1 - C_{20})-alkyl and/or (C_3 - C_8)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

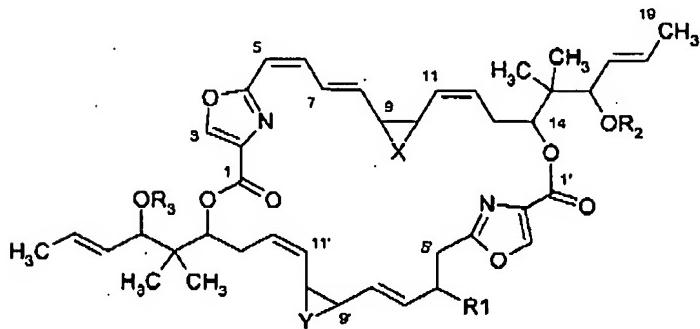
X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond,
with the proviso that the compound in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is the part of a double bond is excluded,
its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof, to a human or animal in need thereof ~~of such treatment~~.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) A method for the treatment of[:] benign or malignant oncoses in humans or animals selected from the group consisting of breast cancer, lung cancer, ovarian cancer, skin cancer, prostate cancer, colonic cancer, renal cell cancer, hepatic cancer, pancreatic cancer and cancers of the brain); inflammatory diseases selected from the consisting of bronchial asthma, allergic rhinitis, allergic conjunctivitis, atopic dermatitis, eczema, and allergic angiitis; inflammations mediated by eosinophils such as eosinophilic pneumonia; pulmonary infiltration with eosinophilia syndrome (PIE syndrome); urticaria; ulcerative colitis; Crohn's disease; psoriasis; or keratosis, comprising administering a compound of the general formula Ia



Formula Ia

in which independently of one another

R1 is:

- (x) hydrogen,

- (xi) OR₄,
- (xii) part of a double bond to C_{5'},

R₂, R₃ and R₄ are:

- (xvi) hydrogen,
- (xvii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (xviii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (xix) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl,
- (xx) (C₁-C₄)-alkoxycarbonyl, (C₁-C₄)-alkylaminocarbonyl (C₁-C₄)-alkylaminothiocarbonyl, (C₁-C₆)-alkyl-carbonyl or (C₁-C₆)-alkoxycarbonyl-(C₁-C₆)-alkyl,
it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, NH-(C₃-C₁₂)-cycloalkyl, OH, O-(C₁-C₂₀)-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, OH, O-(C₁-C₂₀)-alkyl and/or (C₃-C₈)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond,
with the proviso that the compound in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is the part of a double bond is excluded, its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof to a human or animal in need of such treatment.

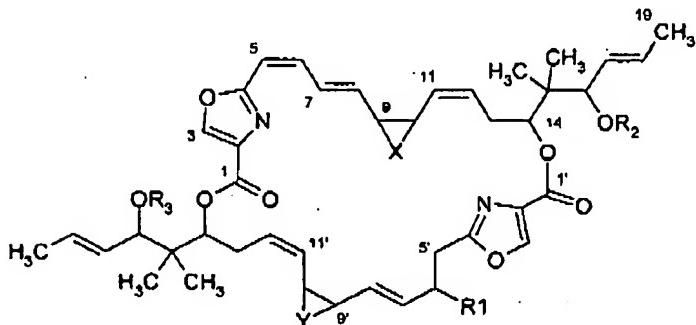
10. (Previously Presented) The method as claimed in claim 9 wherein the oncos is breast cancer, ovarian cancer, lung cancer, skin cancer, prostate cancer, renal cell cancer, hepatic cancer, pancreatic cancer, colonic cancer or brain cancer in humans.

11. (Currently Amended) The method of claim 9, wherein the compound of formula Ia is administered in combination with another antitumor agent.

12. (Currently Amended) The method of claim 9, wherein the compound of formula Ia is administered in combination with paclitaxel, docetaxel, vincristine, vindesine, cisplatin, carboplatin, doxorubicin, ifosfamide, cyclophosphamide, 5-FU, methotrexate or in combination with an immunomodulator or antibody or in combination with a signal transduction inhibitor.

13. (Currently Amended) The method of claim 12, wherein the signal transduction inhibitor is Herceptin, Glivec or Iressa.
14. (Previously Presented) The pharmaceutical composition of claim 3, which is in the form of a solution, suspension, emulsion, foam, ointment, paste, patch or implant.
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Currently Amended) A method for the treatment of a tumor disease selected from the group consisting of prostate carcinoma, lung carcinoma, leukemia, paclitaxel- and vindesine-resistant tumors, and doxorubicin-resistant tumors, tumors of the stomach, tumors of the neck, tumors of the uterus, tumors of the head and neck, tumors of the large and small intestine, skin cancer, sarcoma, adenocarcinoma, melanoma, lymphoma, leukemia, non Hodgkin's lymphoma, Hodgkin's disease, breast cancer, ovarian cancer, transitional-cell bladder carcinoma, small-cell lung cancer, multiple myeloma, kaposi's sarcoma, cervical cancer, pancreatic cancer, testicular carcinoma, prostate cancer, hepatic cancer, renal cancer, skin cancer, cancers of the brain, acute lymphatic leukemia (ALL), acute promyelocytic leukemia (APL), rhabdomyo-sarcoma, eureblastoma, Wilm's tumor, medulloblastoma, choriocarcinoma, and non-small cell lung cancer, cervical carcinoma, ovarian

adenocarcinoma, glioblastoma, lung carcinoma, breast cancer, melanoma, colon cancer and blood cancer, comprising administering a disorazole compound of the general formula Ia:



Formula Ia

in which independently of one another

R1 is:

- (xiii) hydrogen,
- (xiv) OR₄,
- (xv) part of a double bond to C_{5'},

R2, R3 and R4 are:

- (xxi) hydrogen,
- (xxii) unsubstituted or substituted (C₁-C₆)-alkyl,
- (xxiii) (C₁-C₄)-alkyl substituted by one or more fluorine atoms, preferably a trifluoromethyl group,
- (xxiv) unsubstituted or substituted (C₁-C₄)-alkyl-(C₆-C₁₄)-aryl, unsubstituted or substituted (C₁-C₄)-alkyl-heteroaryl,
- (xxv) (C₁-C₄)-alkoxycarbonyl, (C₁-C₄)-alkylaminocarbonyl (C₁-C₄)-alkylaminothiocarbonyl, (C₁-C₆)-alkyl-carbonyl or (C₁-C₆)-alkoxycarbonyl-(C₁-C₆)-alkyl,

it being possible for the substitution of the alkyl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, NH-(C₃-C₁₂)-cycloalkyl, OH, O-(C₁-C₂₀)-alkyl to take place singly or, on identical or different atoms, multiply by identical or different substituents, and it being possible for the substitution of an aryl radical by F, Cl, Br, I, CN, NH₂, NH-(C₁-C₂₀)-alkyl, OH, O-(C₁-C₂₀)-alkyl and/or (C₃-C₈)-heterocyclyl having 1 to 5 heteroatoms, preferably nitrogen, oxygen, sulfur to take place singly or, on identical or different atoms, multiply by identical or different substituents,

and

X, Y are: in each case individually independently of one another or together oxygen, sulfur, two vicinal hydroxyl groups, two vicinal methoxy groups, part of a double bond,
with the proviso that the compound in which R1 is methoxy, R2, R3 are hydrogen, X is oxygen and Y is the part of a double bond is excluded, its tautomers, E/Z isomers, stereoisomers, including the diastereomers and enantiomers, and the physiologically tolerable salts thereof, to an individual in need of such treatment alone or in combination with a cytotoxic substance and/or an inhibitor of signal transduction.